Attorney Docket No.: 5580-02102

## AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

## **Listing of Claims:**

1. (currently amended) A circuit comprising:

a first N-type transistor having a first terminal coupled to a power supply, a second terminal and a first gate terminal, wherein the first terminal is coupled to a power supply; and

a filter coupled between the power supply and the first gate terminal;

a second transistor having a third terminal, a fourth terminal and a second gate terminal, wherein the third terminal is coupled to the second terminal to have the first transistor supply current to the second transistor, and wherein the fourth terminal is an output terminal to provide an output voltage; and

an operational amplifier circuit having its amplifier output coupled to the second gate terminal, wherein the fourth terminal is coupled to a feedback network of the operational amplifier circuit to regulate the output voltage.

- 2. (currently amended) The circuit as recited in claim 1 wherein the filter is configured to reduce noise from the power supply at the first gate terminal.
- 3. (currently amended) The circuit as recited in claim  $\pm 2$  wherein the filter is a low pass filter.
- 4. (currently amended) The circuit as recited in claim 3 wherein the low pass filter includes a resistor-capacitor (RC) filter coupled between the power supply and the first gate terminal and a capacitor coupled between the first gate terminal and ground.
- 5-7. (canceled)
- 8. (currently amended) The circuit as recited in claim 7 1 wherein the second gate

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terminal an input of the operational amplifier circuit is coupled to the an output of a bandgap generator, and wherein an output voltage on the output voltage node is a reference voltage used as an input to an operational amplifier circuit which sets a reference to regulate the output voltage.

## 9-18 (Canceled)

19. (currently amended) A carrier medium comprising a database which is operated upon by a program executable on a computer system, the program operating on the database to perform a portion of a process to fabricate an integrated circuit including circuitry described by the database, the circuitry described in the database including:

a first N-type transistor having a first terminal-coupled to a power supply, a second terminal and a first gate terminal, wherein the first terminal is coupled to a power supply; and

a filter coupled between the power supply and the first gate terminal;

a second transistor having a third terminal, a fourth terminal and a second gate terminal, wherein the third terminal is coupled to the second terminal to have the first transistor supply current to the second transistor, and wherein the fourth terminal is an output terminal to provide an output voltage; and

an operational amplifier circuit having its amplifier output coupled to the second gate terminal, wherein the fourth terminal is coupled to a feedback network of the operational amplifier circuit to regulate the output voltage.

- 20. (currently amended) The carrier medium as recited in claim 19 wherein the filter is eonfigured to reduce noise from the power supply at the first gate terminal.
- 21. (currently amended) The carrier medium as recited in claim 19 20 wherein the filter is a low pass filter.
- 22. (currently amended) The carrier medium as recited in claim 21 wherein the low pass filter includes a resistor-capacitor (RC) filter coupled between the power supply and the

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first gate terminal and a capacitor coupled between the first gate terminal and ground.

23-25. (canceled)

26. (currently amended) The carrier medium as recited in claim 25 19 wherein the second gate terminal an input of the operational amplifier circuit is coupled to the an output of a bandgap generator, and wherein an output voltage on the output voltage node is a reference voltage used as an input to an operational amplifier circuit which sets a reference to regulate the output voltage.

27-29. (canceled)